

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A heat exchanger, in particular an evaporator for air-conditioning systems in motor vehicles, having a number of heat transfer surfaces made from metal, in particular aluminum or aluminum compounds[[,]] to which a plurality of layers have been applied, nanoparticles being used for the coating, the first layer of the plurality of layers comprising nanoparticles of a first composition applied to the aluminum or aluminum compounds and providing corrosion resistance to the aluminum or aluminum compounds and the second layer of the plurality of layers comprising nanoparticles of a second composition different than said first composition and having hydrophilic properties and a wetting contact angle with water of less than or equal to 40°, wherein the nanoparticles of the first layer or the second layer comprise organic and/or inorganic compounds of boron and/or cerium dissolved and/or dispersed in inorganic and/or organic solvents.

Claims 2-4 (Cancelled).

5. (Currently amended) The heat exchanger as claimed in claim 1, A heat exchanger, having a number of heat transfer surfaces made from metal to which a plurality of layers have been applied, nanoparticles being used for the layers, in which the

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nanoparticles comprise nanoparticles of organic and/or inorganic compounds of aluminum, silicon, boron and/or transition metals, preferably from transition groups IV and V of the periodic system, and/or cerium dissolved and/or dispersed in inorganic and/or organic solvents are used for the coating.

6. (Currently amended) The heat exchanger as claimed in claim 1, in which each layer thickness amounts to less than 1.5 μm or equal to 1.5 μm , preferably less than 1 μm or equal to 1 μm , and in which the total layer thickness amounts to less than 5 μm or equal to 5 μm .

7. (Currently amended) A process for the surface treatment of heat exchangers, in particular as claimed in claim 1, in which a plurality of layers are applied to a number of heat transfer surfaces made from metal, in particular aluminum or aluminum compounds, with nanoparticles being used for the coating.

8. (Currently amended) The process as claimed in claim 7, in which the nanoparticles of organic and/or inorganic compounds of aluminum, silicon, boron and/or transition metals, preferably from transition groups IV and V of the periodic system, and/or cerium dispersed and/or dissolved in inorganic and/or organic solvents are used for the coating.

9. (Previously presented) The process as claimed in claim 7, in which the layers are applied by dipping, flooding or spraying, with the individual layers being applied in direct

succession without any intermediate drying.

10. (Previously presented) The process as claimed in claim 7, in which the layers are applied by dipping, flooding or spraying, with the individual layers being applied in separate treatment steps in each case with intermediate drying.